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EXAMINER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/521,398  
Filing Date: January 14, 2005  
Appellant(s): COMER ET AL.

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Jorge Tony Villabon  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 10/9/07 appealing from the Office action  
mailed April 23, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,515,377	Horne et al	5-1996
2004/0033061	Hughes, Jr. et al	2-2004

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 15-27 are rejected under 35 U.S.C. 101 because the claim is directed to a recording medium storing nonfunctional descriptive material.

Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are neither physical "things" nor statutory processes. See, e.g. Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory) and merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. See MPEP 2106.IV.B.1.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-12, and 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes, Jr. et al in view Horne et al.

Hughes, Jr. et al discloses a digital video recording apparatus that shows substantially the same limitations recited in claims 1, 6-7, 15, and 19-20, including the feature providing a multiple version of a digital recording (See Hughes, Jr. et al's Figure 1), the feature of multiplexing a base layer with an enhancement layer, the base layer representing a first version of the digital recording, and the enhancement layer having enhancement data which can be combined with the base layer to represent a second version of the digital recording as specified in the present claims 1, 6-7, 15, and 19-20. (See Hughes Jr. et al's Figure 5).

Hughes, Jr. et al fails to specifically disclose the feature of the base layer data including cells associated with the base interleaving units and the enhancement layer data including cells associated with the enhancement interleave units as specified in the present claims 1, 6-7, 15, and 19-20.

Horne et al does disclose a video encoding apparatus which includes the claimed feature of the video data having the feature of base layer representing a version of the video data and the feature of the enhancement layer representing another version of the

video data, wherein the base layer data including cells associated with the base interleaving units and the enhancement layer data including cells associated with the enhancement interleave units as specified in the present claims 1, 6-7, 15, and 19-20. Applicant's attention is directed to Horne et al's Figure 1, and the corresponding disclosure.

It would have been obvious to one skilled in the art to modify the Hughes, Jr. et al's video recording apparatus wherein the provided video data having the base layer and the enhancement layer would incorporate the capability of the base layer data including cells associated with the base interleaving units and the enhancement layer data including cells associated with the enhancement interleave units in the same conventional manner as is shown by Horne et al. The motivation is to increase the quality of the recorded video data, thereby, providing a clearer video signal at reproduction time as suggested by Horne et al.

With regard to claim 2, the feature of interleaving the base layer with an enhancement layer as specified thereof is present in cited reference of Hughes Jr. et al. (See Hughes Jr. et al's claim 5).

With regard to claims 3-4, and 16-17, it is noted that the limitations recited thereof are present in Hughes Jr. et al, including the feature of storing the base interleave units and the enhancement interleave units in an alternating scheme as specified thereof. (See Hughes Jr. et al's Figure 1, components 114, 112).

With regard to claims 5, and 18, the feature of the playback time being correlated to the base interleave unit to be approximately equal to a playback time correlated to

the enhancement interleave units as specified thereof would be inherently present in the cited reference of Hughes Jr. et al. Because, one of ordinary skill in the art would readily recognize that playback two different versions of the same movie (Standard definition an high definition versions) would approximately take the same playback time since the two versions are basically the same movie.

With regard to claims 8-9, and 21-22, the feature of the coding being a base data in a format substantially similar to MPEG-2 as specified thereof is present in Hughes Jr. et al. (See Hughes Jr. et al's page 2, paragraph [0029], lines 7-8).

With regard to claims 10, and 23, the feature of the second version comprising high definition program content as specified thereof is present in Hughes Jr. et al. (See Hughes Jr. et al (See Hughes Jr. et al's claim 16).

With regard to claims 11, and 24, the feature of storing the base layer and the enhancement layer on a single side storage medium as specified thereof is present in Hughes Jr. et al. (See Hughes Jr. et al's Figure 1, component 110).

With regard to claims 12, and 25, the feature of the storage medium being a DVD as specified thereof is present in Hughes Jr. et al. (See Hughes Jr. et al's Figure 1, component 110).

6. Claims 13-14, and 26-27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes Jr. et al, and Horne et al as applied to claims 1, and 15-16 above, and further in view of Official Notice.

The proposed combination of Hughes Jr. et al and Horne et al indicated above does disclose a DVD apparatus that shows substantially the same limitations recited in

claims 13-14, and 26-27, including the feature of the base layer and the enhancement layer as specified in the present claims 13-14, and 26-27. (See Hughes Jr. et al's Figure 1).

The proposed combination of Hughes Jr. et al and Horne et al indicated above fails to specifically disclose the feature of the decoder time stamp and the presentation time stamp as specified in the present claims 13-14, and 26-27.

Examiner takes Official Notice in that it is notoriously well known in the video encoding/decoding art to have a decoder time stamp and a presentation time stamp added to the encoded video data for the purpose of adjusting the decoding time and the display time during playback operation as specified in the present claims 13-14, and 26-27.

It would have been obvious to one skilled in the art to modify the proposed combination of Hughes Jr. et al and Horne et al's apparatus wherein the video data generated in the compressing means provided thereof (See Hughes Jr. et al's Figure 1, components 106, and 108) would include the feature of the decoder time stamp and a presentation time stamp added to the encoded video data for the purpose of adjusting the decoding time and the display time during playback operation in the same conventional manner as shown in the prior art. Examiner has taken Official Notice. The motivation is to adjust the decoding time and the display time during playback operation in the same conventional manner as suggested in the prior art.



**(10) Response to Argument**

Appellant's arguments filed 10/9/07 have been fully considered but they are not persuasive.

Regarding the Appellant's argument in that the rejection of claims 15-27 under 35 U.S.C 101 being improper because the claims are directed to a functional, physical arrangement of layer elements on a storage medium, Examiner disagrees. As indicated in the Final and the Advisory actions, and contrary to Appellant's argument, it is noted that the claims only recites a medium having nonfunctional descriptive material stored thereon. There are no physical arrangements of layers on the medium. The layers recited in the claimed invention are directed to layers of data representing two different versions of recording signal. There are no physical arrangements of layer elements on the storage medium as argued by Appellant. It is to be noted that the claimed invention only calls for a base layer comprising of base data and an enhancement layer comprising enhancement data. It is further to be noted that these two sets of data are stored on the medium with nonfunctional descriptive material associated thereof.

Regarding the Appellant's argument in that the proposed combination of Hughes et al and Horne et al indicated above is being improper because the cited reference of Horne et al fail to disclose the claimed feature of the base layer data including cells associated with the base interleaving units and the enhancement layer data including cells associated with the enhancement interleave units, Examiner disagrees. It is noted that such a feature is clearly shown in the cited reference of Horne et al. Appellant's attention is directed to Horne et al's column 8, lines 27-30, where it is disclosed base

layer data including cells associated therewith and enhancement layer data including cells associated therewith as claimed.

Regarding the Appellant's argument in that the proposed combination of Hughes et al and Horne et al indicated above is improper because the cited reference of Horne et al fail to disclose the claimed feature of "the base layer comprising base data including cells associated with base interleave units **representing a first version of digital recording** and wherein cells associated with the enhancement interleave units can be combined with said cells associated with said base interleave units to **represent a second version of the digital recording**", Examiner disagrees. It is noted that such a feature of the base data representing a first version of digital recording and the enhancement data being combined with the base data to represent a second version of digital recording argued by Appellant is clearly disclosed in the base reference of Hughes et al. Appellant's attention is directed to Hughes et al's Figure 5 where such a feature is clearly shown. It is to be noted, however, that the Horne et al's reference is only cited in the proposed combination indicated above for the teaching of the "base layer data including cells associated with the base interleaving units and the enhancement layer data including cells associated with the enhancement interleave units". Therefore, when Hughes et al is modified in view of the teaching of Horne et al and for the reason as indicated in the above rejection, the proposed combination of Hughes et al and Horne et al does disclose the claimed invention argued by Appellant.

Regarding the Appellant's argument in that the proposed combination of Hughes et al and Horne et al indicated above is improper because it fails to disclose the claimed

feature of "interleaving the base layer with the enhancement layer as claimed, Examiner disagrees. It is noted that such a feature of interleaving the base layer with the enhancement layer as claimed is clearly disclosed in Hughes et al's claim 5.

Regarding the Appellant's argument in that the proposed combination of Hughes et al and Horne et al indicated above is improper because it fails to disclose the claimed feature of dividing video objects within the base layer and the enhancement layer and storing the base interleave units and the enhancement interleave units in alternating scheme as specified in the claimed invention, Examiner disagrees. It is noted that such a feature of storing the base interleave units and the enhancement interleave units in an alternating scheme is present in Hughes et al's Figure 1, component 114, and 112. The feature of dividing video objects would be an inherent feature of Hughes et al because Hughes et al disclose that the base layer data and the enhancement layer are encoded using MPEG encoding scheme. See Hughes et al's page 2, and paragraph [0029]; furthermore, see Hughes et al's page 3, last line of paragraph [0034], where the reference refers to "demultiplexing of interleave data packets".

Regarding the Appellant's argument in that the proposed combination of Hughes et al and Horne et al indicated above is improper because it fails to disclose the claimed feature of "wherein a number of the base interleave units is approximately equal to a number of the enhancement interleave units", Examiner disagrees. It is noted that such a feature would be an inherent feature of Hughes et al's reference because one of ordinary skill in the art would readily recognize that both the base data and the enhancement data are directed to same movie. Therefore, the number of units with

respect to the base and the enhancement data of that same movie must be approximately equal.

Regarding the Appellant's argument in that the proposed combination of Hughes et al and Horne et al indicated above is improper because it fails to disclose the claimed feature of "playback time correlating the base interleave units being approximately equal to the playback time correlating to the enhancement interleave units", Examiner disagrees. It is noted that such a feature would be inherently present in the cited reference of Hughes Jr. et al. Because, one of ordinary skill in the art would readily recognize that playback two different versions of the same movie (Standard definition an high definition versions) would approximately take the same playback time since the two versions are basically the same movie.

Regarding the Appellant's argument in that the proposed combination of Hughes et al and Horne et al indicated above is improper because it fails to disclose the claimed feature of "coding the based data in a format substantially similar to MPEG-2, or in H.264 format, Examiner disagrees. It is noted that these encoding formats argued by Appellant would have been a present characteristic disclosed in the Hughes et al's reference. Appellant's attention is directed to Hughes et al's page 2, and paragraph [0029].

Regarding the Appellant's argument in that the proposed combination of Hughes et al and Horne et al indicated above is improper because it fails to disclose the claimed feature of "the second version of the digital recording comprising high definition program content", Examiner disagrees. It is noted that such a high definition feature argued by

Appellant is present characteristic of the Hughes et al's reference. Appellant's attention is directed to Hughes et al's Figure 5, component 310.

Regarding the Appellant's argument in that the proposed combination of Hughes et al and Horne et al indicated above is improper because it fails to disclose the claimed feature of "storing the base layer and the enhancement layer on a single side of the storage medium", Examiner disagrees. Appellant's attention is directed to Hughes et al's Figure 1, component 110, where it is shown the capability of storing the base layer data and the enhancement layer data on the recording medium.

Regarding the Appellant's argument in that the proposed combination of Hughes et al and Horne et al indicated above is improper because it fails to disclose the claimed feature of "the storage medium being a DVD", Examiner disagrees. Appellant's attention is directed to Hughes et al's Figure 1, component 110, where it is shown the feature of "the storage medium being a DVD".

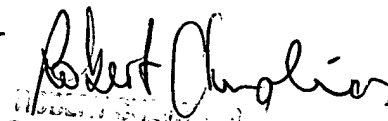
**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

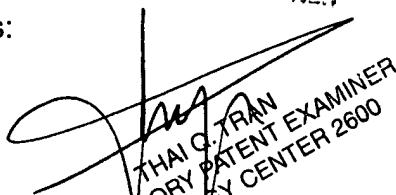
Respectfully submitted,


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